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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,928	07/27/2001	David H. Levy	13159-004001	9129

26161 7590 10/23/2003

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225 FRANKLIN ST  
BOSTON, MA 02110

EXAMINER

CHOW, DOON Y

ART UNIT	PAPER NUMBER
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2675

DATE MAILED: 10/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/916,928

Applicant(s)

LEVY ET AL.

Examiner

Dennis-Doon Chow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26,38-53 and 55-66 is/are pending in the application.
- 4a) Of the above claim(s) 16-25,38-52 and 55-57 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15,26,53 and 58-66 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)    ✓ /
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5, 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. Applicant's election without traverse of Species I, claims 1-15, 26, 53 and 58-66 in Paper No. 9 is acknowledged.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 7-14 and 58-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lapeyre (4994992) in view Furuhata et al. (5943043).

Lapeyre discloses a keyboard, comprising: a tactile feedback means; a matrix of key regions which includes interstitial key regions and raised key regions (Fig. 2); means for activating the key regions; means for scanning the matrix for activated keys (Fig. 1); and means for providing an output to the user in response to the activation of the keys.

Lapeyre does not disclose activating an adjacent key region prior to release of a first activated key region.

Furuhata discloses a versatile input device for inputting data signal to a display system comprises a plurality of input regions. Furuhata further discloses activating a first activated region, and an adjacent region before the release of first activated region

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within a predetermined time period (see Abstract). In response to the activation of the adjacent region, the device provides a final output to the user.

It would have been obvious to one ordinary skill in the art to use Furuhata's activation means in Lapeyre's keyboard. This would have been obvious because Furuhata's activation means allows the keyboard to output more data with the same number of key regions.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lapeyre in view of Furuhata et al. as applied to claims 1-5, 7-14 and 58-61 above, and further in view of Ahmadian (5914677).

The modified Lapeyre does not disclose driving two adjacent rows simultaneously and seeking for two simultaneous output columns.

Ahmadian, in the same input field, discloses an apparatus and a method for scanning a keyboard device. Ahmadian further discloses scanning multiple adjacent rows simultaneously and seeking for multiple simultaneous output columns (see Abstract).

It would have been obvious to one of ordinary skill in the art to use Ahmadian's scanning means in the keyboard device of the modified Lapeyre to scanning two adjacent row simultaneously and seeking for two simultaneous output columns. This would have been obvious because the speed of scanning the keyboard device can be improved by scanning multiple adjacent rows simultaneously.

5. Claims 15, 26, 53 and 62-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lapeyre (4994992) in view Furuhashi et al. (5943043).

Lapeyre discloses a keyboard, comprising: a tactile feedback means; a matrix of key regions which includes interstitial key regions and raised key regions (Fig. 2); means for activating the key regions; means for scanning the matrix for activated keys (Fig. 1); means for activating combination key regions; and means for providing an output to the user in response to the activation of the keys.

Lapeyre does not disclose driving two adjacent rows simultaneously while examining the columns for switch activation.

Ahmadian, in the same input field, discloses an apparatus and a method for scanning a keyboard device. Ahmadian further discloses scanning multiple adjacent rows simultaneously while examining the columns for switch activation (see Abstract).

It would have been obvious to one of ordinary skill in the art to use Ahmadian's scanning means in the keyboard of Lapeyre to scanning two adjacent row simultaneously while examining the columns for switch activation. This would have been obvious because the speed of scanning the keyboard can be improved by scanning multiple adjacent rows simultaneously.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis-Doon Chow whose telephone number is 703-305-4398. The examiner can normally be reached on 8:30-6:00, Alternate Monday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Saras can be reached on 703-305-9720. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

D. Chow  
October 20, 2003



DENNIS-DOON CHOW  
PRIMARY EXAMINER